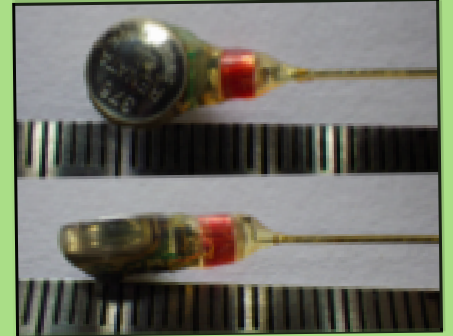


# Ultralight 3D Printed Battery Development:

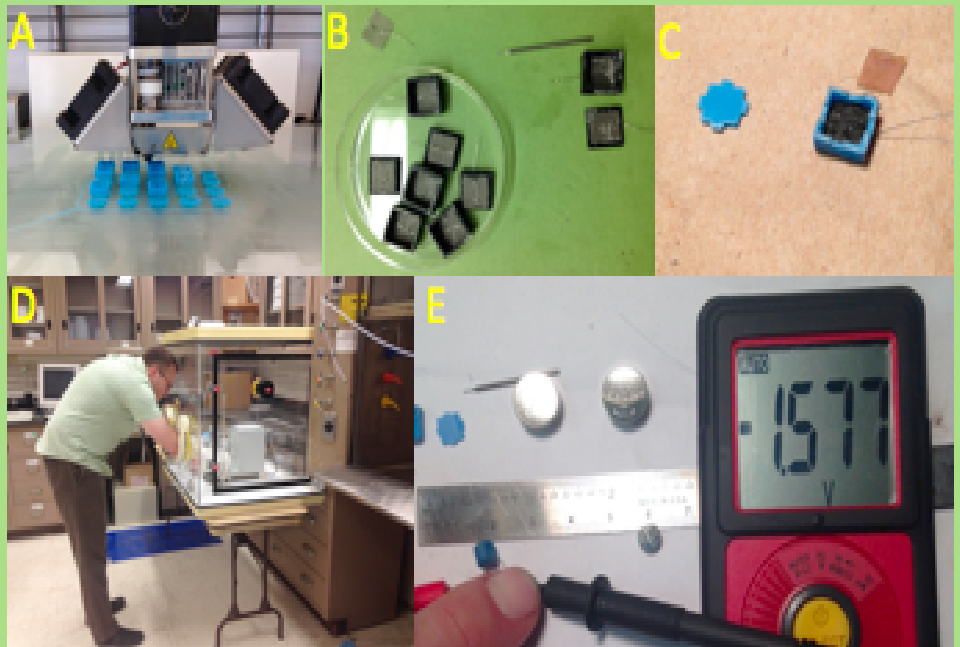
## Breaking the Weight/Energy Battery Barrier for Small Animal Electronic Tracking Devices



**Goal:** Reduce the weight of current avian tracking systems for increased range and improved health monitoring at the USGS Pacific Island Ecosystems Research Center



**Results:** Multiple custom battery casings were designed and produced using a 3D printer (A), anodes and battery chemistry were added (B&C) in a protected, oxygen-free environment (D) to produce working batteries substantially lighter than commercial versions (E).



**Future:** Developed technology has applications for smaller animal and insect trackers; micro UAS, nano satellite, and distributed sensor platforms

